

JUNE 8, 2011
PROPOSED REVISIONS TO PENALTY CALCULATIONS
HANDOUT #3
(for discussion purposes only)

(Note: the single underline and strikeout represent the 45-day comment period revisions.
The double underline and strikeout represent additional proposed revised language.)

§Section 17949. Violations and Penalties.

(de) ~~For violation (1) how will the degree of noncompliance be determined?~~

Where product manufacturers do not comply with the ~~For~~ rigid plastic packaging container requirements in Sections 17945.3 and 17945.5 ~~violations~~ (i.e., Violation 1 in the preceding table), the Department Board will calculate penalties using the data from the approved compliance certifications and the following formulas. The process gives ~~allows~~ credit for progress ~~intowards~~ meeting ~~one or more of the~~ compliance options by container line (or averaged container lines), and the total penalty is. ~~Compliance values are converted to “points” which allows for comparisons of all compliance options, and are based on a weighted average calculation of the product manufacturer’s overall progress towards compliance.~~

~~The degree of noncompliance will be determined according to the following point system where the amount of violation will be determined according to the following formula: \$50,000 minus \$1,800 times number of points or [\$50,000 – (\$1,800 x number of points)].~~

~~Rigid Plastic Packaging Container Compliance Point System~~

Points	PC-Resin (Percent PCR)	Source Reduction (Percent SR)	Reuse (Times)	Refill (Times)
1	1	0.4	0.2	0.2
2	2	0.8	0.4	0.4
3	3	1.2	0.6	0.6
4	4	1.6	0.8	0.8
5	5	2	1	1
6	6	2.4	1.2	1.2
7	7	2.8	1.4	1.4
8	8	3.2	1.6	1.6
9	9	3.6	1.8	1.8
10	10	4	2	2

11	11	4.4	2.2	2.2
12	12	4.8	2.4	2.4
13	13	5.2	2.6	2.6
14	14	5.6	2.8	2.8
15	15	6	3	3
16	16	6.4	3.2	3.2
17	17	6.8	3.4	3.4
18	18	7.2	3.6	3.6
19	19	7.6	3.8	3.8
20	20	8	4	4
21	21	8.4	4.2	4.2
22	22	8.8	4.4	4.4
23	23	9.2	4.6	4.6
24	24	9.6	4.8	4.8
25	25	10	5	5
26	26	10.4	-	-
27	27	10.8	-	-
28	28	11.2	-	-
29	29	11.6	-	-
30	30	12	-	-
31	31	12.4	-	-
32	32	12.8	-	-
33	33	13.2	-	-
34	34	13.6	-	-
35	35	14	-	-
36	36	14.4	-	-
37	37	14.8	-	-
38	38	15.2	-	-
39	39	15.6	-	-
40	40	16	-	-

41	41	16.4	-	-
42	42	16.8	-	-
43	43	17.2	-	-
44	44	17.6	-	-
45	45	18	-	-
46	46	18.4	-	-
47	47	18.8	-	-
48	48	19.2	-	-
49	49	19.6	-	-
50	50	20	-	-

(1) For each rigid plastic packaging container line (or average of multiple container lines) claiming a postconsumer material compliance option per Section 17945.5(b) or alternate compliance method option per 17945.5(c):

$$\text{Penalty} = \frac{\left[\sum (W_{\text{RPPC}} \times N_{\text{RPPC}})_n \right]}{W_{\text{PM}}} \times [50,000 - (\text{CC} \times D)]$$

where: W_{RPPC} = the weight of each rigid plastic packaging container

N_{RPPC} = the total number of rigid plastic packaging containers

n = the number of container lines in the compliance calculation

W_{PM} = the total weight of rigid plastic packaging containers for all the product manufacturer's lines (calculated such as shown in the Sample Table below)

CC = the calculated compliance rate per the applicable formula in 17945.5

D = 2,000 if the line's postconsumer material compliance value was at least 25 percent (i.e., in compliance) OR 1,800 if the value was less than 25 percent (i.e., out of compliance)

(2) For each rigid plastic packaging container line (or average of multiple container lines) claiming a source reduction compliance option per Section 17945.5(d):

$$\text{Penalty} = \frac{\left[\sum (W_{\text{S}} \times N_{\text{S}})_n \right]}{W_{\text{PM}}} \times [50,000 - (\text{CC} \times 2.5 \times D)]$$

where: W_{S} = the weight of each source reduced rigid plastic packaging container

N_{S} = the total number of source reduced rigid plastic packaging containers

n = the number of container lines in the compliance calculation

W_{PM} = the total weight of rigid plastic packaging containers for all the product manufacturer's lines (calculated such as shown in the Sample Table below)

CC = the calculated compliance rate per the applicable formula in 17945.5
2.5 = the factor used so that the penalties due will equal zero or less for
lines in compliance

D = 2,000 if the line's source reduction compliance value was at least 10
percent (i.e., in compliance) OR 1,800 if the value was less than 10
percent (i.e., out of compliance)

(3) For each rigid plastic packaging container line (or average of multiple container
lines) claiming a reuse or refill compliance option per Section 17945.5(e) or (f):

$$\text{Penalty} = \frac{\left[\sum (W_P \times P)_n \right]}{W_{PM}} \times [50,000 - (CC \times 5 \times D)]$$

where:

W_P = the weight of each original rigid plastic packaging container sold

P = the number of original rigid plastic packaging containers sold

n = the number of container lines in the compliance calculation

W_{PM} = the total weight of rigid plastic packaging containers for all the product
manufacturer's lines (calculated such as shown in the Sample Table below)

CC = the calculated compliance rate per the applicable formula in 17945.5

5 = the factor used so that the penalties due will equal zero or less for lines in
compliance

D = 2,000 if the line's reuse or refill compliance value was at least 5 (i.e., in
compliance) OR 1,800 if the value was less than 5 (i.e., out of compliance)

(4) For each rigid plastic packaging container line (or average of multiple container
lines) claiming a recycling rate compliance option per Section 17945.3(d)(7):

$$\text{Penalty} = \frac{\left[\sum (W_{RPPC} \times N_{RPPC})_n \right]}{W_{PM}} \times [50,000 - ((CC / 1.8) \times D)]$$

where: W_{RPPC} = the weight of each rigid plastic packaging container

N_{RPPC} = the total number of rigid plastic packaging containers

n = the number of container lines in the compliance calculation

W_{PM} = the total weight of rigid plastic packaging containers for all the
product manufacturer's lines (calculated such as shown in the Sample
Table below)

CC = the calculated compliance rate per the approved methodology per
17943.5(d)(7)

1.8 = the factor used so that the penalties due will equal zero or less for
lines in compliance

D = 2,000 if the line's recycling rate compliance value was at least 45
percent (i.e., in compliance) OR 1,800 if the value was less than 45
percent (i.e., out of compliance)

(5) For each rigid plastic packaging container line (or average of multiple container lines) claiming a floral industry compliance option per Section 17945.3(d)(8):

$$\text{Penalty} = \left[\frac{\sum (W_P \times P)_n}{W_{PM}} \right] \times [50,000 - ((CC \times 1.0416667) \times D)]$$

where:

W_P = the weight of each original rigid plastic packaging container sold

P = the number of original rigid plastic packaging containers sold

n = the number of container lines in the compliance calculation

W_{PM} = the total weight of rigid plastic packaging containers for all the product manufacturer's lines (calculated such as shown in the Sample Table below)

CC = the calculated compliance rate, in months, per the approved methodology per 17943.5(d)(8)

1.0416667 = the factor used so that the penalties due will equal zero or less for lines in compliance (i.e., with reuse of at least 24 months)

D = 2,000 if the line's floral container compliance value was at least 24 months (i.e., in compliance) OR 1,800 if the value was less than 24 months (i.e., out of compliance)

(6) As shown in the sample table following, the Department will sum the weights of the product manufacturer's rigid plastic packaging containers for each line (and/or average of lines, when applicable) in order to calculate the weighted Violation 1 penalties due by line and in total. The "calculated compliance values" ("CC"s in the formulas above) are those submitted in the product manufacturer's certification and subsequently reviewed and approved by the Department. The "weighted penalties" by line are calculated using the formulas above. Where the "Total Penalty" is less than or equal to zero, no payment is due. (Note this chart does not show the entire calculation, just these two components.)

Sample Table

	<u>(A)</u>	<u>(B)</u>	<u>(C)</u>	<u>(D)</u>		
<u>Cont. Line</u>	<u>Compliance Option & threshold</u>	<u>Total # RPPCs</u>	<u>Wt of Indiv RPPC (gms)</u>	<u>Total RPPC Wt (B x C) (gms)</u>	<u>Calc'd Compliance Value (% or #)</u>	<u>Weighted Penalty (\$)</u>
<u>1</u>	<u>PCM (25%)</u>	<u>5,000,000</u>	<u>55.00</u>	<u>275,000,000</u>	<u>9.00 %</u>	<u>\$ 443.77</u>
<u>2</u>	<u>Avg PCM (25%)</u>	<u>10,000,000</u>	<u>100.00</u>	<u>1,000,000,000</u>	<u>35.00 %</u>	<u>(620.65)</u>
<u>3</u>	<u>Source Red (10%)</u>	<u>55,000</u>	<u>75.00</u>	<u>4,125,000</u>	<u>10.00 %</u>	<u>0</u>
<u>4</u>	<u>Reuse (5.0)</u>	<u>9,500</u>	<u>65.00</u>	<u>617,500</u>	<u>5.00</u>	<u>0</u>
<u>5</u>	<u>Refill (5.0)</u>	<u>6,300,000</u>	<u>100.00</u>	<u>630,000,000</u>	<u>3.60</u>	<u>529.37</u>
<u>Total</u>			<u>W_{PM}</u>	<u>1,909,742,500</u>	<u>Total:</u>	<u>\$352.49</u>

~~(f) Once the Department Board has determined a product manufacturer's rigid plastic packaging containers are not in compliance with Public Resources Code Section 42310, the Department Board shall apply the following calculations to compliance values calculated pursuant to Section 17945.5 for each rigid plastic packaging container line to determine penalties for that specific line. The individual penalties for each rigid plastic packaging container line shall then be added together to obtain a total penalty amount for that product manufacturer.~~

~~(1) For rigid plastic packaging container lines whose compliance values are less than 25.00% PCM; less than 10.00% Source Reduction; or less than 5.00 uses / refills:~~

$$\left[\frac{\text{total gram weight}}{\text{sum total gram weight}} \right] \times \left[\$50,000.00 - [(\$1,800.00) \times (\text{individual container compliance points})] \right]$$

~~(2) For rigid plastic packaging container lines whose compliance values are equal to or greater than 25.00% PCM; equal to or greater than 10.00% Source Reduction; or equal to or greater than 5.00 uses / refills:~~

$$\left[\frac{\text{total gram weight}}{\text{sum total gram weight}} \right] \times \left[\$50,000.00 - [(\$2,000.00) \times (\text{individual container compliance points})] \right]$$

~~(3) Data Used in Penalty Calculation:~~

~~For each rigid plastic packaging container line item or rigid plastic packaging container line, as reported in the certification:~~

- ~~(A) Individual rigid plastic packaging container gram weight;~~
- ~~(B) Number of rigid plastic packaging containers reported;~~
- ~~(C) Percent postconsumer material, source reduction, number of refills, or number reuses for individual rigid plastic packaging container lines as calculated pursuant to Section 17945.5;~~

~~(4) Steps to Calculate Penalties:~~

~~(A) Determining Total Gram Weight:~~

~~To determine the 'total gram weight' for each rigid plastic packaging container line item reported, the Department Board shall multiply the individual rigid plastic packaging container weight, in grams, by the number of those particular rigid plastic packaging containers.~~

~~As shown in Sample 1 below, rigid plastic packaging container line 1, the rigid plastic packaging container weighs 55.00 grams, and there were 5,000,000 of those rigid plastic packaging containers sold into California. 55.00 grams is multiplied by 5,000,000 to obtain a 'total gram weight' of 275,000,000.00 grams for that particular rigid plastic~~

~~packaging container. The calculation shall be repeated for each rigid plastic packaging container line individually.~~

~~(B) Determining Sum Total Gram Weight:~~

~~To determine the 'sum total gram weight,' the Department Board shall add all "total gram weight" values to reach the "sum total gram weight" as demonstrated in column (C) line 11 in Sample 1 below, where the 'sum total gram weight' is 20,945,642,500.00 grams.~~

~~(C) Converting Compliance Points:~~

~~To convert from percent postconsumer material, percent source reduction, or reuse or refill into compliance points, as calculated in Section 17945.5 for each container line item, the Department Board shall apply the following formulas:~~

~~Postconsumer Material: _____ %PCM \times (1.00) = Compliance Points~~

~~Source Reduction: _____ %SR \times (2.50) = Compliance Points~~

~~Reuse / Refill: _____ #of uses \times (5.00) = Compliance Points~~

~~Example:~~

~~Postconsumer Material: _____ 9.00 \times (1.00) = 9.00 Compliance Points~~

~~Source Reduction: _____ 7.58 \times (2.50) = 18.95 Compliance Points~~

~~Reuse / Refill: _____ 4.00 uses \times (5.00) = 20.00 Compliance Points~~

~~(D) Penalty Per Product Line~~

~~To determine penalties per product line the Department Board shall input the values for weight of each container, in grams, in the product line; number of containers in the product line; Sum Total Gram Weight; and Compliance Points into the equations set out in subsections (f)(1) and (f)(2):~~

~~Sample 1 as demonstrated in column H, line 1 of the spreadsheet below:~~

$$\left(\frac{[(55.00\text{g}) \times (5,000,000 \text{ containers})]}{(20,945,642,500.00\text{g})} \right) \times \left(\$50,000.00 - [(\$1,800.00) \times (9.00 \text{ compliance points})] \right) =$$

$$\left(0.01312922 \right) \times \left(\$33,800.00 \right) = \$443.77 \text{ total penalty Sample 1, line 1}$$

~~(E) Total Weighted Penalty~~

~~To determine the 'Total Weighted Penalty' the Department Board shall add each rigid plastic packaging container line's penalty. In Sample 1, the 'Total Weighted Penalty' is \$24,783.82.~~

Sample 1: Penalty Calculation

	(A) Number of Containers Reported (for each product line)	(B) Total Weight of container (grams per individual container)	(C) Cont. Wt. (B) X # Cont. (A)	Post Consumer Material (PCR) Option		(F) Percent PCR	(G) weighted PENALTY	(H) Formula Used
				(D) Container's PCR weight (grams per individual container)	(E) Cont. Wt. (D) X # Cont. (A)			
1	5,000,000	55.00	275,000,000.00	4.95	24,750,000.00	9.00	\$ 443.77	[(C1/(C11)) x (50,000.00-(1,800.00 x 9.00))]
2	10,000,000	100.00	1,000,000,000.00	35.00	350,000,000.00	35.00	\$ (620.65)	[(C2/(C11)) x (50,000.00-(2,000.00 x 35.00))]
3	75,000,000	75.00	5,625,000,000.00	15.00	1,125,000,000.00	20.00	\$3,759.73	[(C3/(C11)) x (50,000.00-(1,800.00 x 20.00))]
4	9,000	100.00	900,000.00	0.00	0.00	-	\$ -	-
5	55,000	75.00	4,125,000.00	0.00	0.00	-	\$ -	-
6	11,000,000	250.00	2,750,000,000.00	0.00	0.00	-	\$ -	-
7	7,000,000	250.00	1,750,000,000.00	0.00	0.00	-	\$ -	-
8	9,500	65.00	617,500.00	0.00	0.00	-	\$ -	-
9	6,300,000	100.00	630,000,000.00	0.00	0.00	-	\$ -	-
10	99,000,000	90.00	8910,000,000.00	0.00	0.00	-	\$ -	-
11	90,009,000	1,160.00	20,945,642,000.00	54.95	1,499,750,000	21.74	\$ 3,582.85	◀ = PENALTY

Sample 1: Penalty Calculation (continued)

	(A) Number of Containers Reported (for each product line)	(B) Total Weight of container (grams per individual container)	(C) Cont. Wt. (B) X # Cont. (A)	Source Reduction (SR) Option		(K) Percent Source Reduction	(L) weighted PENALTY	(M) Formula Used
				(I) Container's NON-Source Reduced Weight (grams per individual container)	(J) Cont. Wt. (B) X # Cont. (C)			
1	5,000,000	55.00	275,000,000.00	0.00	0.00	-	\$ -	-
2	10,000,000	100.00	1,000,000,000.00	0.00	0.00	-	\$ -	-
3	75,000,000	75.00	5,625,000,000.00	0.00	0.00	-	\$ -	-
4	9,000	100.00	900,000.00	125.00	1,125,000.00	20.00	\$ (2.15)	[(C4/(C11)) x (50,000.00-(2,000.00 x 50.00))]
5	55,000	75.00	4,125,000.00	83.33	4,583,150.00	10.00	\$ 0.00	[(C5/(C11)) x (50,000.00-(2,000.00 x 25.00))]
6	11,000,000	250.00	2,750,000,000.00	290.00	3,190,000,000.00	13.79	\$(2,490.92)	[(C6/(C11)) x (50,000.00-(2,000.00 x 34.48))]
7	7,000,000	250.00	1,750,000,000.00	255.10	1,785,700,000.00	2.00	\$ 3,425.83	[(C7/(C11)) x (50,000.00-(1,800.00 x 5.00))]
8	9,500	65.00	617,500.00	0.00	0.00	-	\$ -	-
9	6,300,000	100.00	630,000,000.00	0.00	0.00	-	\$ -	-
10	99,000,000	90.00	8,910,000,000.00	0.00	0.00	-	\$ -	-
11	90,009,000	1,160.00	20,945,624,500.00	753.43	4,981,408,150	9.56	\$ 933.66	◀ = PENALTY

~~Sample 1: Penalty Calculation (continued)~~

	(A) Number of Containers Reported (for each product line)	(B) Total Weight of container (grams per individual container)	(C) Cont. Wt. (B) X # Cont. (A)	Reuse Option (N) Number of Reuses	(O) weighted PENALTY	(P) Formula Used
<u>1</u>	<u>5,000,000</u>	<u>55.00</u>	<u>275,000,000.00</u>	-	\$ -	-
<u>2</u>	<u>10,000,000</u>	<u>100.00</u>	<u>1,000,000,000.00</u>	-	\$ -	-
<u>3</u>	<u>75,000,000</u>	<u>75.00</u>	<u>5,625,000,000.00</u>	-	\$ -	-
<u>4</u>	<u>9,000</u>	<u>100.00</u>	<u>900,000.00</u>	-	\$ -	-
<u>5</u>	<u>55,000</u>	<u>75.00</u>	<u>4,125,000.00</u>	-	\$ -	-
<u>6</u>	<u>11,000,000</u>	<u>250.00</u>	<u>2,750,000,000.00</u>	-	\$ -	-
<u>7</u>	<u>7,000,000</u>	<u>250.00</u>	<u>1,750,000,000.00</u>	-	\$ -	-
<u>8</u>	<u>9,500</u>	<u>65.00</u>	<u>617,500.00</u>	<u>5.00</u>	\$ 0.00	$[(C8/(C11)) \times (50,000.00 - (2,000.00 \times 25.00))]$
<u>9</u>	<u>6,300,000</u>	<u>100.00</u>	<u>630,000,000.00</u>	<u>3.60</u>	\$ 529.37	$[(C9/(C11)) \times (50,000.00 - (1,800.00 \times 18.00))]$
<u>10</u>	<u>99,000,000</u>	<u>90.00</u>	<u>8,910,000,000.00</u>	<u>0.40</u>	\$ 19,737.95	$[(C10/(C11)) \times (50,000.00 - (1,800.00 \times 2.00))]$
<u>11</u>	<u>90,009,000</u>	<u>1,160.00</u>	<u>20,945,642,500.00</u>	-	\$ 20,267.32	◀ = PENALTY

~~PENALTY = \$ 24,783.82~~

~~◀ = [(C11) + (L11) + (O11)]~~

